

Definition

A breast lump is any discrete mass noticed by the patient, significant other, or physician. Rarely, nonpalpable masses may be detected by screening mammography.

Technique

Ask about the patient's initial symptom and how it was first noticed. Next inquire as to the development of the lesion and the overall duration of the problem. Inquire specifically about any changes during the menstrual cycle. Ask if there have been any skin or nipple changes, retraction or swelling, edema, inflammatory changes, or enlarged lymph nodes.

Baseline information must include the patient's menstrual and reproductive history, including:

- The patient's age at menarche, age at menopause, and whether menopause was spontaneous or artificially induced.
- The reproductive history, including the ages at which the patient became pregnant, number of pregnancies, and number of live births.
- The use of hormones such as birth control pills or estrogen shots.
- Whether or not the patient nursed her children.
- The personal and family history regarding breast cancer.
- Any history of fibrocystic disease or other breast problems. Has the patient had a previous breast biopsy?
- Any history of trauma, infection, or previous radiation therapy to the breast or chest wall.

The history also represents a good opportunity to reinforce the concepts of breast self-examination and periodic mammography.

Basic Science

Benign lesions are far more common than malignant lesions in both males and females. Of all breast lumps, 60 to 80% are benign. The most common concern, however, is still that a given lump may be the first evidence of breast cancer. Breast cancer is the most common cancer in white women

over 40 years of age and will occur in 1 out of every 11 women. The risk of breast cancer is increased among those who have previously had breast cancer and among women whose mothers or sisters have had breast cancer. Women who are childless or who had their first child late in life are more likely to develop breast cancer than those who have borne children at an early age.

Clinical Significance

Fibrocystic disease accounts for at least half of all breast lumps in women. These lesions are commonly multiple and bilateral, and are often characterized by pain and tenderness that increases just before the menstrual period. Three stages are recognized: (1) a tender premenstrual swelling occurs in young women; (2) in the late twenties and thirties, multinodular changes can be felt, occasionally with a dominant two-dimensional mass; (3) a cystic stage is seen in patients in their fourth or fifth decade of life. These lesions often develop suddenly, accompanied by a dull pain or burning sensation.

Fibroadenomas are usually found in young women; they have a consistency similar to that of a handball. They are mobile, solid, firm, well delineated, and usually painless masses. They may undergo rapid change in size during adolescence, pregnancy, menopause, or with hormonal treatment.

Breast cancer presents as a lump or mass in the breast in approximately 90% of patients. The lesions are typically solitary, unilateral, irregular, hard, nonmobile, and painless. Pain does not, however, exclude breast cancer.

Mammary duct ectasia, a benign lesion, is one of the lesions that may produce nipple discharge in postmenopausal women.

Intraductal papillomas may produce unilateral nipple discharge, occasionally with a mass in the area of the areola.

References

- Haagensen CD. Physician's role in the detection and diagnosis of breast disease. In: *Diseases of the breast*. 2nd ed. Philadelphia: W.B. Saunders, 1971;99–148.
- Pilnik S, Leis HP Jr. Clinical diagnosis of breast lesions. In: Gallager HS, Leis HP Jr, Synderman RK, Urban JA, eds. *St. Louis: CV Mosby*, 1978;75–97.